

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A fuel cell stack comprising: a fuel cell having an inlet, a flow field in fluid communication with said inlet and an outlet in fluid communication with said flow field; a vaporized water source in fluid communication with said inlet; a differential pressure transducer repeatedly measuring a differential pressure across said flow field and generating a set of differential pressure signals; and a computer comprising a controller in communication with said differential pressure transducer, said controller having executable logic for determining ~~a differential pressure fluctuation parameter as a representative statistical value as a~~ root-mean-square value from said set of differential pressure signals and control circuitry for controlling said vaporized water source in response to the root-mean-square value said ~~differential pressure fluctuation parameter~~.

2.-3. (Cancelled)

4. (Currently Amended) The fuel cell of claim 1 wherein said controller further comprises executable logic for comparing said ~~representative statistical~~ root-mean-square value to a threshold ~~variable~~ value.

5-16. (Cancelled)